



Central Fisheries Board
Code of Practice for the use of Fyke Nets for
Fisheries Management Purposes



Central Fisheries Board
An Príomh-Bhord Iascaigh

The Central Fisheries Board is a statutory body with responsibility for inland fisheries and sea angling operating under the aegis of the Department of Communications, Energy and Natural Resources and was established under the Fisheries Act 1980.

The principal functions of the CFB are to advise the Minister for Communications, Energy and Natural Resources on policy relating to the conservation, protection, management, development and improvement of inland fisheries and sea angling, to support, coordinate and provide specialist support services to the Regional Fisheries Boards and to advise the Minister on the performance by the Regional Fisheries Boards of their functions

As part of its remit, the Central Fisheries Board carries out research and experimental work that are necessary for the performance of its functions. Fyke nets are an essential tool and are used for a variety of purposes within the Board.

Fyke nets come in many shapes, sizes and configurations, but all operate on the principle of a leader net which guides fish into a hoop net trap with a tapering cod end. Many fyke nets have double leaders which funnel the catch towards the trap and are staked out. The fyke net type authorised for commercial use in Ireland and used in scientific surveys is known as a small Dutch fyke, or summer fyke net (Moriarty, 1975; Poole, 1990). These consist of two funnel shaped traps facing each other, joined by a leader net, which usually has a mesh size of 16mm. Each trap consists of two chambers and a cod-end with knot to knot mesh sizes of approximately 16, 12 and 10mm and the entrance is usually 50-60cm in diameter. The standard fyke has a leader length of about 8m and each trap end is 3.5m long, giving an overall length of about 15m when set. There may be variations in mesh size and length dimensions and these are not stipulated in the legislation. Fyke nets are usually joined end to end and fished in trains of multiple nets, often 3, 5 or 10 in a train.

Fyke nets have been used to capture a variety of fish species in Irish waters. Designed principally as eel traps, they are favoured by fishery managers because they trap rather than enmesh captured individuals. As such, they are a relatively non-destructive sampling tool. Fyke nets have been used as the standard methodology for sampling eel stocks in fresh water since 1965 (e.g. see Moriarty 1975, Poole 1990, Matthews et

al. 2001). They have been used in stock assessments of primarily cyprinid waters where they target benthivorous species such as tench and carp. Fyke nets are now also used in standard stock assessment protocols for WFD monitoring of lakes and transitional waters. Monitoring of native crayfish (*Austropotamobius pallipes*) populations in arterially drained river channels has also been conducted using fyke nets. Principal inland fisheries uses include:

- Fish stock assessment (principally cyprinids)
- Assessment and management of eel stocks
- Fish stock removal
- Crayfish monitoring

Owing to recent dramatic declines in European Otter (*Lutra lutra*) populations, the species and its habitat are afforded strict protection under national and international law (Wildlife Act 1976, 2000, CITES 1979, Council of Europe 1979, EU Habitats Directive 92/43/EEC). The high priority conservation status associated with the otter has resulted in its listing under Annexes II and IV of the Habitats Directive as species which require concrete actions to improve their conservation status. Concern has been raised at the potential impact of fyke nets on otter populations in Ireland. Poole et al. (2007) conducted a comprehensive review of their potential impacts, and possible mitigation measures. The mitigation measures included:

- fitting otter guards on fyke nets where possible
- avoid shallow (<2m) and/or running water
- regular servicing of nets
- do not set fyke nets in locations where they may become dry
- recording and reporting of otter mortalities

The current document aims to develop a code of practice for the use of Fyke Nets for Fisheries Management Purposes based on these suggested mitigation measures where practicable. The CFB cannot avoid using fyke nets to survey shallow (<2m) and running waters. However, the CFB will use otter guards wherever possible. The use of otter guards is restricted for certain activities because they impact on the size-

selectivity of the fyke nets. The CFB will endeavour to service all fyke-nets at least once every 24 hours, will avoid setting nets in locations where they may become dry and will record and report all otter mortalities (see table below). In the event that otter mortalities occur, the CFB undertake to complete and submit to the National Parks and Wildlife Service, an 'Otter Mortality in Fyke Nets' report. This report will be submitted in December of each year.

This code of practice will be regarded as a living document and will be revised as necessary.

Table 1. Fyke net uses in the Central Fisheries Board.

Use	Survey Details		Mitigation measures suggested by Poole et al. 2007						
	Target Species	Target Size	Waterbody	Type	Regular servicing of nets*	Record & report otter mortalities	Otter guard	Avoid shallow (<2m) and/or running water	Avoid setting nets above low-water mark
Crayfish Monitoring	Crayfish	All size classes	Arterially drained channels		Yes	Yes	Yes	No	-
Fish Removal	Cyprinids	< 20cm	Lake/canal		Yes	Yes	Yes	No	-
Fish Removal	Cyprinids	All size classes	Lake/canal		Yes	Yes	No	No	-
Stock Assessment - Fishery Management	Fin fish species & eel	All size classes	Lake/river/canal/transitional waters		Yes	Yes	No	No	Yes
Stock Assessment - WFD	Fin fish species & eel	All size classes	Non-SAC lakes		Yes	Yes	No	No	-
Stock Assessment - WFD	Fin fish species & eel	All size classes	Transitional waters and SAC lakes		Yes	Yes	Yes	No	Yes
Eel Management Programme (CPUE/Stock Structure)	Eel	> 30cm	Lake/river/canal/transitional waters		Yes	Yes	No	No	Yes
Eel Management Programme (Other)	Eel	> 30cm	Lake/river/canal/transitional waters		Yes	Yes	Yes	No	Yes

* servicing at least every 24 hrs

References

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